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Plain and Easy DIRECTIONS

For the Use of

HARROWGATE WATERS:

Adapted to the meanest Capacity; and principally intended for the Use of all who attend there.

B Y

WILLIAM ALEXANDER, M. D.

E D I N B U R G H:

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Plain and easy DIRECTIONS

FOR THE

Use of HARROWGATE WATERS.

INTRODUCTION.

SIMPLE fountain water, considered as a pure elementary substance, when properly attended to, is perhaps one of the most valuable remedies we are as yet acquainted with.

Whether some of the more active minerals and metals being found dissolved in simple water, and rendering it, in the opinion of mankind, still more medicinal and salutary, was the occasion of their first using it for the cure of diseases; or whether chance directed them to this, as to most other remedies, I shall not undertake to determine;

mine ; but certain it is, that, whatever gave rise to the use of mineral waters, they have for time immemorial been resorted to, both for the preservation of health and cure of diseases ; and though, among the almost infinite numbers that always have, and still continue to attend them with such various and contrary complaints, many should reap no benefit, there are still numerous instances handed down to us, as well as others that have occurred in our own times, which demonstrate their usefulness.

Viewing them in this light, it is not surprising that their use should have become so universal ; as it is natural for those that are in distress to try every expedient which yields even the most distant prospect of relief. But, how watering places, as they are now called, should have become the general rendezvous of the gay and sprightly, as well as of the infirm and valetudinary, is not so easily accounted for : Nor indeed is it of much concern. It is sufficient for our present purpose, to know that

that they are attended by all ranks and denominations of mankind; that the waters are drunk in greater or smaller quantities by almost all who attend them; that many of them, instead of being the simple inoffensive medicines they are commonly reckoned, are, on the contrary, powerful active operators on the human body, capable of producing very important changes in the state of it; and that, consequently, they ought not to be used in so thoughtless and indiscriminate a manner as they are at present all over Europe.

Of late years, several physicians, in order both to introduce themselves into the world, and to discourage this indiscriminate use of mineral waters, have wrote treatises on those of them that are most famous and best attended. But hardly any of these have either been addressed to or made intelligible to the bulk of mankind: Instead of which, they have generally begun with a pompous parade of learning, an analysis or view of the component principles of the
water .

water they treated of; which learning or analysis, of whatever use they might be to the learned reader, could certainly be but of very little to the unlearned drinker, whose only aim is to attain health by such a water, and not to investigate the principles it contains. For this reason I have judged an analysis of the Harrowgate waters unnecessary, as I do not address this treatise to the learned investigator of principles, but to the unlearned solicitor of health and relief from distempers.

As the benefit of every class of the drinkers of Harrowgate water is the principal intention of the following Directory, I have endeavoured to render the language and meaning plain and intelligible even to the meanest capacity. Where I could depend upon facts and observations, I have rather chose them for my guides than speculative reasoning and arguments drawn from principles; where these could not be found, or were not sufficient for my purpose, the reasonings and arguments I have made use of are not unnecessarily

necessarily multiplied; and I have all along endeavoured to state them with plainness and perspicuity.

*General Rules for drinking the Harrogate
Sulphur and Steel Waters.*

IT has been observed of a great many mineral waters both in this, and other kingdoms, that, at first drinking, they have a tendency to bring on a giddiness of the head and sensation of fulness over all the body; and this more especially when these waters have no purgative quality, and even sometimes when they have such a quality, if they do not happen to exert it properly. But sometimes when they do exert it properly, this giddiness will come upon the patient; but then it is rarely of consequence enough to require any particular attention.

When this troublesome, and sometimes dangerous, symptom is attended with costiveness, in order to relieve it, the common practice

tice at Harrowgate is to take the quantity of a nutmeg of lenitive electuary, or one ounce of Glauber's salt, along with the water. But as the sulphur-water contains in itself a good deal of purging salt, in most cases, I have found, that increasing the dose of it answered sufficiently; but sometimes it does not. Then I would advise the patient to take from half an ounce to one ounce and a half of Glauber's salt along with the first draught of the water in the morning. This salt I prefer to the lenitive electuary, because it operates sooner, with less griping, and begins to operate nearly about the same time as the water; whereas the lenitive electuary operating a little later, the power of the water and of it, being exerted at different times, are divided, and consequently weakened, as also on account of its cheapness, many people generally attending mineral waters, who can purchase a little Glauber's salt, who cannot afford lenitive electuary.

Various have been the conjectures of medical authors, in endeavouring to discover what
it

it is in mineral waters which affects the head with giddiness. In a work of this nature, it would be foreign to the purpose to investigate causes, as my design chiefly is, without troubling my reader with this investigation, to point out the method of destroying their effects.

The train of reasoning by which a man has been induced to make such and such an application, would be of little use to the unlearned reader; his capacity and the public utility only require, that the benefits arising from the application itself be pointed out. On this account, without entering into a detail of the reasons which first led me to order the head to be bathed in cold water, early in the morning, before drinking the water, as well as about an hour after drinking it, I shall only observe that I have found this method, in most cases, entirely obviate the giddiness I have been mentioning; in some few cases, however, it has not. So that, upon the whole, though it is a practice which I would recommend to every one, I have not yet had experience enough of it to recommend it as absolutely effectual. Therefore, when the
giddiness

giddiness is already begun, recourse should be had to some purgative, as above directed. And, should it continue some hours after the belly has been sufficiently opened, should a sensation of heat, fulness, and heaviness accompany it, I would then advise a little blood to be taken from the arm, if no other disease or symptom forbid.

These hints I thought necessary to premise, concerning the methods of preventing and curing the giddiness of the head, as it so commonly attacks both the drinkers of the sulphur and steel water.

In giving general directions for drinking these waters, method and perspicuity require that we should begin with the quantity necessary.

The quantity of the sulphur-water generally ordered for a full grown person is, about a medium, at three half pints in the morning, and sometimes another half pint in the evening, which commonly procures from two to four loose stools. But this quantity must be varied according to the strength and constitution of the drinker. A man of a strong habit,

habit, and difficultly purged, shall take four, sometimes five half pints; whereas one of a weak habit shall be sufficiently purged by two. For children of about five or six years of age, one half pint is generally sufficient, and so in proportion for those that are older, till they arrive at maturity.

The steel water at Harrowgate is not strong, in consequence of which few people come there to drink it only. When they do, it may be drunk to the quantity of about two quarts in the twenty four hours, in small draughts at a time, upon an empty stomach, always taking care to keep the body open by Glauber's salt or some other gentle laxative, otherwise, heat, thirst, and sometimes loss of appetite, will ensue.

I cannot conclude this subject, without observing, that many, and those particularly of the lower sort of people, are apt to imagine they can never take too much of any thing that is good for their health; therefore they take as much of the water as their stomachs can possibly bear; and thus often bring diseases upon themselves as bad, and perhaps

worse, than those they expected to be relieved from. It has also happened sometimes, that, when a person was told, he might begin to expect the symptoms of his distemper would abate by the time he had drunk such a quantity of water, he has concluded, the sooner he could drink that quantity, the sooner he might expect relief; therefore endeavoured to drink it with all possible expedition, and almost sacrificed himself to the attempt.

Of the Intervals necessary between each Draught of the Sulphur-Water.

The rule presently observed at Harrogate sulphur-well seems to be, to intermit twenty minutes between every draught of the water, and during this interval to keep in constant motion, either walking or riding.

This is perhaps no bad general rule; but, like all other rules of that nature, admits of exceptions. I shall point out the following :

ing : The falt contained in the fulphur-water is one of the quickeft purges hitherto known; now, in this way of drinking it, there are feveral constitutions whom it will begin to purge before the expiration of forty minutes, the time neceffarily required to finish drinking, and many on whom it will begin to operate before they can get home. There are others, and I have obferved they are chiefly fuch as have been accuftomed to ftrong liquors and high feafoned food, whose ftomachs will by no means bear fo much as half a pint of cold, or even of warm water, in a morning, without making them fick, and who, fhould they repeat the draught before that ficknefs was either altogether or nearly gone off, which it feldom is in twenty minutes, would be fure to throw up the whole of what they had drunk.

A better general rule therefore than the foregoing, and as eafily reducible to practice, is, to drink half a pint of the water as foon as you arrive at the well; and, when
you

you have walked or rode, till the load or sickness at stomach occasioned by it is gone off, take the same quantity, and so on, till you have finished your three or four half pints. If no oppression nor sickness at stomach arises from drinking the water, the draught may be repeated in eight or ten minutes, or less, without any danger or inconvenience.

This rule I have found to agree perfectly with every one whom I desired to observe it; nor have I ever found any body at a loss to understand it, though the time it requires to finish the necessary quantity of water is sometimes more, though oftener much less, than forty minutes.

The same rule may be applied to the steel or Tuet well water, by such as drink several draughts of it in the morning; but as it is generally drunk through the day likewise, it may be taken twice in the forenoon, as often in the afternoon, and once at bed-time. The custom of drinking it at meals I do not approve

approve of, as I am of opinion, that almost every mineral water, and almost every medicated thing, when taken into a full stomach, disturbs digestion. Steel-water, I am certain, does it to many people, and, if any astringent has been eat or drunk, will produce an ink in the stomach.

Under this head I must insert the following directions, which, though not strictly related to the subject, come in here with as much propriety as they could possibly do any where afterward.

Cold water, greedily swallowed when one is warm, generally does mischief, and that in proportion to the largeness of the draught and the quickness of drinking it. The draught of the sulphur-water is large enough for this purpose, and, on account of its exceeding ill taste, is almost always swallowed with the utmost precipitation; therefore, though walking or riding be recommended between each draught, neither of them ought to be violent; but, if any one should put himself into a sweat by them, when his time of drinking

drinking is come, he must put it off for some time, and allow himself to cool, to prevent the ill consequences which otherways would probably happen.

Notwithstanding of what some gentlemen have lately alledged, it seems evident, that this water contains a pretty large quantity of sulphur. Sulphur is an exceedingly volatile principle, and easily evaporates with heat; for this reason the water should always be drunk cold when the stomach will bear it so; when it will not, the best way of heating it is in a glass-bottle of any kind, well stopped, and put into moderately warm water, observing, that, as soon as the stopper is taken out, the mineral water should be poured out likewise, and drunk immediately; for, if it be allowed to remain in the open air while it is warm, the sulphureous principle will always be flying off, and the water consequently lose much of its virtue.

Whether

Whether there are any Preparations necessary before drinking the Water, and what.

It is no very uncommon thing for people to prepare themselves for the drinking the sulphur-water by bleeding, by vomiting and purging. I shall here endeavour to point out when I think the two former necessary; the latter, I persuade myself, can seldom ever be so, as it would be only taking physic in order to prepare one for taking physic, which would border a little on the ridiculous.

Bleeding, vomiting, and purging, are almost the only things one can do by way of preparation; therefore, except in the subsequent cases, preparations of all kinds may as well be omitted: For, whatever theory may say for them, observation has not hitherto demonstrated their utility.

I have already observed, that the sulphur-water often brings on a giddiness of the head, during a few days of the first trials
to

to drink it; along with this, it sometimes also brings on an unusual sensation of heat and fulness all over the body. For this reason, those who have travelled far to the wells, or who have come even a day's journey on horseback, and in warm weather, should rest themselves two or three days before they begin to drink, that the blood and other juices which have been overheated with the journey, may have time to recover their original state; otherwise the heating quality of the waters, joined to the already overheated constitution, may produce various kinds of disorders, as fevers, inflammations, &c.

For the same reason, those who are of a hot constitution, full of blood, and subject to fevers and inflammations, should lose a little blood before they begin to drink the sulphur-water, or after they have begun to drink it, if they find themselves more hot and thirsty than usual, or if their heads ach, or they find an unusual fulness and disinclination to motion.

It

It is sometimes necessary to clean the stomach before drinking the sulphur-water, and this chiefly in such as have their stomachs loaded with a tough phlegm or bile, which not only tends to obstruct the good effect of the water, but to make people drink it with more reluctance, and throw it up again, after they had swallowed it with difficulty. I have met with several instances of stomachs which could not retain the water, till they had thrown up a large quantity of phlegm, after which they drank it with less reluctance, and retained it without any difficulty.

Many people drink a glass of the water just when going to bed, when it is intended to operate as an alterative. The practice is consonant to reason ; but let such as conform to it be cautious to eat little supper, and at least two hours before this bed-time draught, otherwise the digestion will be disturbed, colics and other uneasinesses of the stomach and bowels ensue, which will interrupt the rest, and render the sleeps short and unrefreshing.

I have constantly heard people complain much more of the ill taste and smell of this evening dose than of that which they drank at the well in the morning. In endeavouring to discover the reason of this, I found it to be owing to their drinking it upon a fuller stomach, and, upon trial, I found, that those who could drink it almost without any reluctance in the morning fasting, could with great difficulty get down half a glass of it an hour or two after breakfast or dinner; as also to their standing hard by the maid while she was pouring it out of a bottle, and being in the house where the circulating air did not carry away the effluvia; for they could drink it with less disgust when they walked into the open air, or into another room, and made the maid bring them a glass which they did not stand to see poured out.

Steel-waters are generally reckoned astringent, and on that account some evacuations, as bleeding and purging, are for the most part ordered preparatory to the use of them, lest they should condense and fix
more

more strongly in the constitution any ill humours that may be there at the time of drinking them.

Though this reason may appear specious at first sight, when more closely examined into, it will fall to the ground. For steel-waters do not always act as astringents, their effects being frequently quite the contrary; when they do act as such, this action seems not to proceed, strictly speaking, from a real astringent quality, but from a power they have of correcting, altering, and even sometimes of evacuating some noxious humours in the body: By which alteration or evacuation, the body being freed from the cause which weakened and relaxed it, again becomes firm and robust; but this firmness does not arise from any bracing power in the steel-water, but from its having destroyed the cause of the weakness; and, in this sense, bleeding, sweating, or any other evacuation, may be reckoned astringent.

As steel-waters therefore are not so universal an astringent as they have generally been

been reckoned, the indiscriminate use of evacuations preparatory to drinking them seems to have no real foundation either in theory or nature: Instead therefore of giving a new set of directions, how to prepare the body for drinking them, I shall only refer the reader to those already given for preparing it to drink the sulphur-water. But, as few people, who are full of blood and of gross habits, come to drink the steel-water, but, on the contrary, such as are weakly and relaxed, who neither need nor can bear evacuations, they will therefore seldom be necessary as preparatives to this course. Though, however weak the patient be, he must take care that they do not render him too costive, as they sometimes do; and, on the other hand, they must not purge him, as they sometimes do also; for either extreme will increase his distemper, and consequently his weakness. From 6 to 10 drops of laudanum taken along with them once or twice a day, will prevent their purging; and, should they bind too much, one ounce and a half of Glauber's

Glauber's salt may be dissolved in a quart of spring-water, and a tea-cupful of it taken every night at bed-time, which will commonly procure an easy stool in the morning, without any griping or uneasiness through the night.

Directions for Bathing in the Harrowgate Sulphur-Water.

Warm and cold bathing were much used by the ancients, and constituted no small part of their method, as well of preventing, as of curing diseases; and, considering their utility, both with regard to health and cleanliness, it is much to be regretted that the moderns have paid so little regard to them; because, when properly directed, they seem calculated to produce more valuable and lasting effects, than any that the most celebrated internal remedies can boast of.

As

As my intention is to give a few directions for bathing in the Harrowgate sulphur-water, which water being always used warm for this purpose, it would be unnecessary, as well as foreign to my design, to say any thing of cold bathing or its effects; I shall only therefore make a few plain and necessary remarks on the manner of the operation of the warm bath, previous to those directions for the use of it, that the reader may have some idea of its nature, as well as of the effects he is to expect from it.

Before any one can comprehend how the warm bath operates, he must first understand what follows concerning the human skin.

The human skin is exceedingly porous, even more so than is almost within the reach of credibility: These pores are either the extremities of exhalant or inhalant vessels: By exhalant vessels are meant such as convey useless juices out of the body, as sweat &c.; by inhalant ones, are meant such as imbibe and carry into the body any fluid
with

with which we may be furrounded, as air, water, &c. This being premised, it is easy for the meanest capacity to conceive, that a human body, put into a warm bath, must, in proportion to the time it remains there, suck up a proportional quantity of the water of that bath, with every ingredient that happens to be dissolved in it. And this appears evident, not only from the body weighing heavier after one comes out of the warm bath, but also from the bath-water having lost considerably more of its weight than could have evaporated or been otherways wasted during the operation.

But water, and all things that are dissolvable in it, not only have a power of entering by the human skin, as above described, but are in that manner more immediately conveyed into and mixed with the blood than any thing can be that is taken into the stomach. For every thing that is taken into the stomach must undergo the processes of digestion, chylification, and sanguification ; which processes, for the most part, produce

produce very considerable changes on its nature: But, should they not, a considerable time must elapse before they are compleated; and, after all, the new-made blood, with the medicinal qualities we suppose it to have received from the internal remedy, can only enter the whole mass of blood by one particular vein; and then a considerable time more must elapse, before it can be distributed all over the body, so as to reach the seat of a disease, which happens to be situate in a particular and distant part, or so as to rectify the whole body, should the whole of it be contaminated; whereas, when a medicine is applied in such a manner as to enter into the body by the skin, it then enters into it almost instantaneously, has little time to be changed by any thing it may meet with in its passage into the blood, into every vessel of which it is poured by an innumerable quantity of inlets existing in every part of the body; and therefore, in this manner, may sooner produce its effects, either upon
the

the whole body or any part of it which happens to be diseased.

From the facility with which warm water enters by the skin, and from water being considerably thinner than the blood, it evidently follows, that warm bathing must tend greatly to thin the blood ; for those whose blood is already too thin, it must, on this account, be improper.

Another obvious effect of warm bathing, is relaxation, which, though not hitherto properly accounted for, is a fact so well established, that we meet with few people of weak and relaxed habits who can bear it, without being rendered more so ; such people, therefore, if they are obliged to make trial of it for other diseases, should begin and proceed with the greatest caution, always remembering, that there is perhaps nothing more difficult to restore than proper strength and firmness to a relaxed constitution.

As these few observations will, I flatter myself, give the reader some idea of warm bathing in general, I shall now give a

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few

few plain and simple directions concerning bathing in the Harrowgate fulphur-water.

And here, the first thing necessary is, for the person who intends to bathe, to take care that the water he uses be not mixed; for it is demonstrably evident that there is more water used for bathing almost every day at Harrowgate, than all the springs from which the bath-water is taken can produce in that space of time; the consequence of which must either be, that the bathing-water must be mixed with other water, or that more than one person must bathe in the same water without having it changed. The first of these is frustrating in a great measure the intention of the bath; the second, exclusive of the idea of uncleanness attending it in a place where there are so many people with sores of various kinds, may further be attended with the most unhappy consequences, as the inoculating the bather with some hereditary and incurable disease, which

which ought to be guarded against with the utmost caution.

Having got a bath prepared intirely of the sulphur-water, and no part of which has been used by any body before, the heat of that bath is next to be considered; and in this consideration we are to be guided by the natural heat of the human blood.

The natural heat of the human blood is generally about 98 degrees of Fahrenheit's scale. In constitutions that are irritable and easily affected with sudden changes, the bath should only be a few degrees warmer than the blood, as 110. and hardly should it ever exceed an hundred and twenty in any constitution whatever. At present there is no means of ascertaining the heat of the bath at Harrowgate; but, as it is a matter of much more consequence to the bathers than is generally supposed, I think it necessary that every house should have a thermometer for this purpose, especially as our own feelings are in this case very apt to deceive us,
and

and as an over-heated bath may do a great deal of mischief to many constitutions.

I cannot help here censuring the present manner of bathing at Harrowgate, which is to go into the bath considerably cooler than it is intended to be made afterwards, and, while you are in it, to keep pouring in more hot water from time to time, till it be almost as hot as you can bear it. Were our feelings in all cases infallible judges of what we could bear with impunity, this practice would be a rational one ; but, as this is not really the case, it is founded on a false principle. For here our feelings are, by the slow and gradual increase of the heat, made in a great measure insensible of its force ; and so cheated out of that power they naturally have of warning us of danger ; thus we become not only able to continue in a warm bath slowly heated, but even to enjoy it with pleasure, when of such a degree of warmth as we could not have bore at our first going into it.

By this method of heating the patient
and

and the bath gradually together, I have frequently seen people enjoying themselves in it, while a person immediately come from the open air could not hold is hand in it for the space of five minutes together : A practice which must be attended with evils so obvious that I need not point them out.

I do not deny the necessity of pouring a little hot water from time to time into the bath, otherways it would soon become too cold ; but I would have this always done so as that the heat of the bath should not be raised above 115 or 120 degrees of Fahrenheit's thermometer, and not regulated by our sensations, as they are so apt to be imposed upon.

The next thing to be considered, is the time requisite to continue in the bath, for which indeed hardly any general rule can be given, other than that the first trials should be very short, not exceeding 5 or 6 minutes ; that the effects should be diligently attended to, and the subsequent bathings regulated accordingly.

As

As the warm bath is not a thing of such indifference as most people imagine, my opinion is, that the longest time that even the stoutest person ought to continue in it should not exceed a quarter of an hour. I know many people are hardy enough to keep in it for twenty minutes, or even half an hour, and to repeat it every second or third night for several weeks together, without sustaining any apparent injury; but, on the other hand, the yearly instances of injuries arising from using the bath too warm, and repeating it too frequently, should be a monitor to teach us to beware of falling into the like error.

It is customary at Harrowgate not to begin the use of the warm bath till about ten, or more generally, fourteen days after having drunk the water. Whence this custom could arise, or upon what it is founded, I own I am at a loss to discover; as it seems to have no foundation either on reason or the principles of medicine. It may perhaps be said, in vindication of this practice, that drinking the

the water for some time prepares the body for the warm bath; but, except in some particular cases, what preparation is necessary? surely nothing but a gentle purge at most, which may be obtained as well by one or two doses of the water, as by fourteen, or any greater number.

It may further be alledged, in vindication of this practice, that it fits the humours for passing more easily through the skin, by the sweats procured by the warm bathing: But this is only mere hypothesis, without any proof to support it; and I shall not scruple to affirm, that, all other things being equal, any person shall sweat as copiously by bathing the first day after drinking the sulphur-water as he shall do after having drunk it for a much longer period.

It would not only be too tedious, but also foreign to my purpose, to examine all that may be alledged against bathing before the tenth or fourteenth day after drinking the water. In every address to the public, which has utility only for its aim, facts should

should be preferred to the most specious and even candid reasoning. I therefore lay it down as a fact, that no person was ever hurt by bathing in the sulphur-water the first, second, or third day after his arrival, who would not, in the same circumstances, have been equally hurt, tho' he had postponed his bathing till the fourteenth, twentieth, or later. I would therefore advise, that, in all cases where bathing shall be judged proper, it be begun, at furthest, in a few days after the drinking; and this more especially in diseases of the skin, as in them the sooner it is begun the better, as they often yield more to two or three bathings, than to a month's drinking; and as many of the patients who come to Harrowgate can only stay a month or six weeks, on account of business and other necessary avocations, by beginning to bathe almost as soon as to drink, they have an opportunity of using it several times more than if they did not begin it till the fourteenth day, or later.

Old

Old customs, and the particular customs of places, take a very tenacious hold of mankind; it is therefore a difficult task to destroy them: But, however difficult, it should always be attempted when they are bad, and much better can easily be substituted in their place. I have already mentioned some things which I think faulty in the present mode of conducting the patient while in the bath at Harrowgate; and shall now endeavour to point out what appears to me at least equally faulty in the mode of conducting him after he comes out of it.

Observations on the Manner of conducting the Patient after he comes out of the Bath.

As soon as the patient comes out of the bath, and is rubbed dry, he is conducted in-

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to a small apartment adjoining to the bath-room. In this apartment, there is a bed appropriated to sweating, and to the use of every one who chuses to go into it. Into this bed he is put between two blankets; three or four more blankets are laid over him, and he is ordered to lie and sweat for an hour. After which, he rises, shifts himself, and then goes into a low parlour, where he eats something light for supper, drinks a glass of negus, and then retires, through a long cold passage, to his own bed.

Whether this long process was at first instituted by some formal, pompous physician at Harrowgate, and afterward became customary there, I cannot say; but sure I am, it has nothing but formality to recommend it, some parts of it being by much too indelicate to bear being reflected on, and such as I should never have mentioned, but with a view to abolish.

I would advise all those who intend to go through this process, only to sit down five minutes, and consider, that they are going

ing not only into the same bed, but into the very blankets, where [hundreds have lain before them, and where hundreds have not only lain, but sweated; that these blankets must be filled with that sweat; and that it did not arise always from sound and healthful bodies, but from bodies diseased both internally and externally : And if, after these reflections, they can calmly lie down in it, they must have little delicacy.

Were declamation the purport of this essay, I could paint the going into this bed in still more disgusting colours *; but, as I only want to convince the understanding, and not to play upon the passions, I shall therefore go on to observe, that things not agreeable to the inclination may be, and often are, complied with, when attended with advantages sufficient to overbalance this fault. But, where is the advantage of going into
this

* Let such as want to see a more finished picture of this scene, consult the description of Harrowgate, given by Dr Smollet in his *Humphrey Clinker*.

this common bed ? Has sweating an hour in it any advantage over sweating an hour in any other bed ? Is it possible there can be any mind so weak as to imagine, that a sweat in it can have any superior virtue to a sweat in his own ?

In endeavouring to abolish this practice, it has been objected, that the patient would run a great risque of catching cold, were he to go immediately from the warm bath into his own room. But does not common sense tell us, that the risque is as great, if not greater, after having sweated an hour in this common bed, as it could have been immediately after coming out of the bath ? But most people are of opinion that common sense has nothing to do with regard to the preservation or recovery of health : They are, however, mistaken ; for, whenever the rules of physic, or of any of the other sciences, deviate from it, they are no longer to be trusted.

And here I cannot help observing, that all the three learned professions have been
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but too apt to encroach on the prerogative of reason and sense, or rather perhaps that man has too tamely yielded up that prerogative to the opinion of his counsellor, his physician, or divine. But what deserves still more particular notice is, that now, in this enlightened age, when the opinion of a counsellor is often strictly and scrupulously examined, that of a divine doubted and disregarded, that that of the physician should be still so implicitly taken by amazing multitudes; inasmuch that it is no uncommon thing to see a man of wisdom, learning, and prudence, in all other respects, tamely submit his judgment to some pragmatical doctor, much his inferior in every thing, and that too, not only in physical matters of the most abstruse and intricate nature, but in such as fall immediately under the cognizance of common sense.

But to return to my subject; after the patient has arisen from this sweating bed, he next goes into a low parlour, where there is a large fire. Here the whole of those who
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have bathed that evening generally meet, and have a few light things for supper ; after which they are visited by as many of their friends and acquaintances as think proper ; by whom the room often becomes so much crowded, that, with the large fire, and large company, it becomes almost unsupportable : And yet, after sweating here again for some hours, the patient must retire to his own bedroom, generally through several long, cold, and winding passages. I here appeal to common sense, if this practice can be safer than to retire to it immediately after coming out of the bath.

From a review of this whole process, the least we can say of it, is, that it is far from being well conducted: For the patient is first heated in the bath, then cooled in coming out of it ; heated again in the common sweating bed, then cooled between it and the low parlour where he sups ; heated a third time in this parlour, and then cooled between it and his own bed: Where, after all, he is generally heated a fourth time. Might not this be much better managed ? Would it not be more consonant to reason and

and the safety of the patient, that he should retire to his own bed-room immediately after coming out of the bath ; that he should there eat something light for supper, as a poached egg, mutton-broth, or toasted bread with a little negus, allow himself to cool gradually, and then go to bed ? Or, if he wants to sweat profusely, let him go into bed as soon as he comes from the bath, taking care to have by him a little toasted bread and some negus ; otherways, the bathing and sweating together will be in danger of exhausting his strength and spirits too much. Besides this, he will be the better to have by him a little white wine whey, of which he should take a little every hour or so, as long as he chuses the sweat should continue, and a dry shirt to put on, in case of necessity. And, lastly, let him take care to cool himself gradually in the morning before he arise.

I cannot finish this subject without observing, that sweating after coming out of the bath seems too much practised, and too anxiously sought after, by the generality of bathers,

bathers, as if the whole efficacy of the bath depended on the quantity of sweat procured by it; which, however, is far from being really the case; for the effects of the bath are not to be estimated from, nor do they depend upon, what is sweated out of the body after it: But, when mineral water is employed, they rather depend upon what is taken into the body while in it. Did the effects of the bath depend upon what is thrown out of the body after it by sweating, a sweat as plentiful, and of as long duration, might easily be procured by methods less troublesome, less expensive, and less disagreeable. But, further, many complaints have been relieved by warm bathing, upon which the most plentiful sweats have had no effect; therefore, it is not the sweat procured by the warm bathing which gives the relief. But the sweat is all the evacuation produced by the warm bath. And, since the relief does not arise from what is evacuated from the body, it must arise from what is absorbed into it.

For these reasons, I am clearly of opinion, that, in such cases as do not particularly require sweating, no body should assiduously endeavour to force it. Let the general rule be, to avoid the two extremes of heat and cold after bathing, and to hope for relief, from what the body has imbibed while in the bath, and not from what it sweats out immediately afterwards.

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Directions for the Diet, and Drink of the Patients attending at Harrowgate.

The first great and fundamental rule for diet is temperance, which ought to be steadily attended to in every situation and condition of life : For, though the sick, infirm, and valetudinary, are almost the only people who feel the immediate ill effects of intemperance, and tho' the strong and robust may sometimes practice it long with impunity, its baneful influence will at last blast their vigour, and sap the foundation of the most healthful constitution.

From the days of the Samian sage *, down to the present, to deter mankind from intemperance, has employed the tongue of the declaimer, the pen of the satirist, the reasoning of the philosopher, and the religion of the divine ; and all with less success

* Pythagoras, a celebrated philosopher who declaimed against intemperance and eating of animal food.

cess than could have been wished, and expected. I shall therefore not enter into the subject, especially as it has of late been fully and concisely considered by Dr Cadogan, whose book is now almost in the hands of every one.

Before I proceed, however, let me observe to the water-drinkers, that, when a man has hurt his constitution by free living, when he has seriously resolved to endeavour to restore it again to a sound state, when he has travelled perhaps a tedious journey to Harrowgate, and is attending it at a considerable expence for that purpose; let him not flatter himself that he may still indulge and yet accomplish that purpose; let him not vainly suppose that a few weeks or a few months attendance on the waters, while he is still intemperate, will be able to restore a constitution which he has been all his lifetime destroying by intemperance; let him not imagine that the effects can cease while the cause is remaining; but let him first become steadily temperate in his eating

eating and drinking; and then he may rationally hope that his endeavours shall be crowned with success.

Let us now take a view of the diet at Harrowgate, and see, not only how far it is agreeable to the rules of temperance, but also how it is adapted to the nature of a place intended for the recovery of health. We shall begin with the mode of breakfasting; upon some parts of which I cannot help passing a few strictures. What I have particularly in my eye, is the buttered muffins; not that I think a muffin more unwholesome than any other kind of bread, but because, being a spongy substance, it sucks up too much butter for any stomach of delicacy to bear with ease, and almost for any stomach to digest with propriety.

Muffins should therefore either be much more sparingly buttered, or intirely laid aside. Toast and butter is in some measure liable to the same objection, though not nearly in so high a degree, as the bread commonly made use of for that purpose is not near
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so spongy; it would however be better for most stomachs to lay aside the use of both while drinking the water, and in their place to substitute a little plain loaf-bread, with a little honey, marmalade of oranges, or any other thing that would not lie so heavy on the stomach; and, as toasting bread gives it a binding quality, I would recommend it to every one to consider, before he toasts it, whether or not he requires it with that quality.

I shall not here enter into a particular discussion of the effects of tea. It has been of late condemned by many physicians of credit, and others of the faculty have been its zealous advocates: For my own part, I think it neither possessed of one half of the good or bad qualities that have been ascribed to it by its friends and enemies; and therefore such as are accustomed to drink, and to find it agree with them at other times, need not abstain from it on account of drinking the water: Such as find it does not agree with them, may take balm, sage, or
mint

mint tea, or any other liquid that is light and easily digestible.

Such as have weak delicate stomachs, and are apt to throw up, should be careful not to breakfast too soon after having finished their quantity of water, otherways they will be apt to become sick, and throw up their breakfast, and as much of the water as remains in their stomach along with it.

The dinners at most of the houses in Harrowgate are furnished out in a manner much too luxurious for companies of invalids. Whatever stoicism may pretend to say, there are pleasures in eating and drinking; and these pleasures, when thrown in the way, will sometimes tempt even the most abstemious to deviate from the rules of moderation and temperance. Temptations therefore should always be avoided when possible; but here it is next to impossible; for it being a place where perhaps as many people resort for pleasure as for health, victuals must be prepared to suit the strong and healthy as well as the infirm and valetudinary: Let the latter therefore, from the
variety

variety of dishes that are generally before them, chuse such as are lightest and most easy of digestion; let them never eat of above one or two things at a meal; for nothing is more destructive of health than a variety of different and discordant kinds of food thrown into the stomach together.

But here it will naturally be inquired, What victuals are most easily digested? Though most of the writers on the preservation of health have endeavoured to answer this enquiry, I am of opinion that no precise answer can be given to it, as some stomachs more easily digest one thing, and some another: Let every one therefore observe carefully what agrees with his stomach, and what does not; and let his experience and reason direct him to use the one, and to avoid the other.

With regard to the quantity of aliment, the best rule that can be given, is to take as much as is sufficient to support and nourish the body, and not so much as will overload the stomach, and be difficult to digest:

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In doing this, every individual has a certain guide, if he will listen to the dictates of a natural and undepraved appetite, which, whenever he has eat as much as is necessary, will prompt him to leave off, by being disgusted at more. But many appetites are so depraved, as to have in a great degree lost this power of admonishing; to such, however, there is another method still open: They may be assured that they have committed no excess, when, immediately after eating, they can walk, write, or do any necessary business with ease and alacrity.

It is customary, not only at Harrowgate, but over all Britain, to drink sometimes several glasses of wine, or of other strong liquors, during the time of dinner; a custom which a little reflection will shew to be hurtful to digestion, and which consequently such as have weak stomachs should not comply with; because it is evident that all strong liquors, and particularly spirits and wines, contribute to harden considerably such kinds of meat as are put into them;
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and the harder any meat is rendered it is easy to perceive the more difficult it must be of digestion. I would therefore advise such as eat animal food, to drink water or small beer only, at their meals; and, about half an hour after, when the meat is tolerably broke down in the stomach, they may take a moderate glass of any liquor that agrees with them. Such as eat vegetables only need not observe this rule; because there are few vegetables which become hard by steeping in strong liquors.

Suppers, at all times, and in all situations, ought to be ate with caution, as a state of rest and inactivity generally takes place soon after them, during which digestion is more slowly performed than in the more busy scenes of active life. But at Harrowgate, or any other place, where one attends with a view to recover lost health, double caution is necessary, both with regard to the quality and quantity. The quality should be as simple as possible, such as chicken, tripe, poached eggs, &c. But it will be still better to refrain altogether from solid animal food, and to substitute in its place mutton or veal-

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broth,

broth, rice-gruel, fago, artichokes, asparagus, or any of the vegetables that are in season.

Though I have already made some observations on the quantity of aliment necessary to preserve health, I cannot dismiss this subject without adding, that, when sleep is neither shortened nor disturbed by what has been ate or drunk at supper, when there is neither headach nor bad taste in the mouth next morning, and when we arise properly refreshed, at our usual hour, we may be assured that our meal has not been too large the preceeding night.

I shall finish this subject by observing, that, though I have endeavoured to adapt the few foregoing rules to the water-drinkers at Harrowgate, whose plan is generally to restore a broken constitution ; yet the most part of them may with propriety and usefulness be carried into common life, and will, in that case, tend to save us the trouble of these frequent repairs we are often vainly prompted to expect we shall receive from mineral waters

ters and medical prescriptions. What particular rules may afterwards occur as necessary in particular diseases shall be taken notice of afterwards.

Of Air.

Air that circulates freely, that is dry, and in other respects healthful, is at all times necessary, but more particularly so at a watering place of this kind, where perhaps one half, or, at least, one third of the people who attend, come from crowded cities, where the air is far from being pure, and where the diseases they come to get rid of have perhaps arisen from that impurity.

There are few places in England, perhaps none, that can boast of a better air than Harrowgate ; there it circulates freely, is not interrupted by wood, nor rendered humid by stagnating water ; and, as far as I can judge,
possesses

possesses every thing necessary to render it desirable and healthful. I speak here of High Harrowgate, where the air circulates more freely than at Low Harrowgate; though, even at this last, it is less obstructed than in many parts of England.

After having said thus much of the goodness of the air at Harrowgate, all that is further necessary, is to persuade people to take as much of it, without doors, as possible, and to endeavour to render it as pure within doors as the nature of the lodging houses will admit of.

With regard to the first of these, the only argument I shall use, is, to lay down these simple and obvious facts: That air is of all other things the most necessary to animal life; that good air is consequently the most necessary towards health; that the air of Harrowgate is indisputably good; and that many people who are there, have either come from confinement by business, or crowded cities, and must return to the same scenes,
where

where they cannot enjoy it in such perfection.

At Harrowgate, the second demands a very peculiar degree of care and attention; for, in every place where the air does not circulate freely, as in rooms that are seldom or never opened, it looses by degrees its spring, and at last becomes altogether unfit for being breathed: And this happens sooner in a room that is inhabited or slept in by one or more persons; for the air in this case not only loses its spring, by want of circulation, but likewise by being repeatedly taken into, and thrown out of, the lungs; for every time it is so taken in and thrown out again, it loses something of that principle which renders it necessary to animal life. This any one may satisfy himself of, by taking a large bladder full of air, and breathing backwards and forwards into it, through a small pipe, when he will find, that, after he has breathed the air a few times over, it will neither fill up the bladder nor his own lungs; so that he must be absolutely suffocated,

suffocated, if he does not soon breathe fresh air from another source.

One single person sleeping in a small room breathes the whole air in it more than once over in a night; hence it is less pure than air that has not been breathed; and hence a person coming from the fresh air, into a bed-room in the morning, is sensible that the air in the bed-room is disagreeable. If two or more sleep in the same room, it becomes thereby still more unwholesome; and this unwholesomeness increases every night, if the room is not well ventilated and cleared of its bad air through the day.

Almost all the bed-rooms at Harrowgate are small; two people sleep in many of them; they not only stand in great numbers together on the same floor, but are two stories, one over the other; the houses, during the warmer months, are generally crowded; and this crowd does not consist altogether of sound, healthy people, but of a mixture, in which are many infirm and diseased. Hence every lodging house in some measure resembles an hospital;

spital ; and hence a great deal of care is necessary in airing and cleaning, not only the bed-chambers, but the whole house.

I am sensible that the bed-chambers here are kept as clean as at any public place of the same nature ; but they are not properly aired, almost every one of them being kept perpetually locked up. This may seem a strange assertion to people who have never been at Harrowgate, but may be easily explained. Few of those who attend at the wells bring sufficient conveniences along with them to lock up all their cloaths and other necessaries. There are no conveniences in those bed-rooms in which any thing can be locked up ; consequently, they are obliged either to keep their rooms constantly locked, or submit to have their necessaries stolen. Most people chuse rather to risque sleeping in an ill-aired room than to lose their goods ; and to this it is owing, that those rooms are constantly shut, and not so well aired as they ought to be.

This evil, which I think of great consequence,

sequence, might be easily remedied ; for, in almost every bed-room, there are drawers, which have almost all locks, but no keys, owing, as is said, to their being frequently lost among so numerous a succession of guests. If the landlords, on this account, will not provide any more keys, I would propose that the chamber-maids should provide them, either to sell or to lend, which would be a considerable perquisite to them, the means of having the bed-chamber doors left open, and of having the house well aired.

I have insisted the more on this article of airing the bed-chambers at Harrowgate, as I think it much neglected at present, and of the utmost consequence to the weak and sickly part of the guests; and further, as I think it a pity that the good effects of so fine an air as is breathed without doors should be counterbalanced by a bad air within.

Of

Of the Exercise necessary with the Harrowgate-water.

Exercise is so requisite to the preservation of health, that the wise Author of nature thought proper to make it absolutely necessary towards attaining the means of our existence, when he decreed that the ground should not bring forth fruit without culture, and that man should earn his bread with the sweat of his brow.

But exercise, as well as the two foregoing articles, has been so fully treated of, by almost all the writers on health, that it would be superfluous in me to give any other directions concerning it, than such as are necessary for the particular circumstances of the water-drinkers at Harrowgate. But, before I proceed to these, I shall mention a few

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things in general, relating to it, which I think necessary to be known, as the good or bad effects of it frequently depend upon them.

The *first* is, that exercise is most healthful upon an empty stomach, and that none, at least of the severer kinds of it, ought ever to be attempted in the contrary circumstances.

The *second* is, that that kind of exercise is the best which is performed by a voluntary exertion of our own members, and not by some other power by which we are put into, and continued in motion.

The *third* is, that, in whatever manner we exercise ourselves, we must observe never to exhaust our strength and spirits too much. Many, form a resolution of using exercise, set forward too eagerly in the execution of that resolution, and finding, that, in their first efforts, the body does not keep pace with the mind, they drop the project as absurd and impossible. But let such consider, that, whoever has been long accustomed to inactivity,

tivity, must not flatter himself, that he can begin to take much exercise all at once ; he must rather begin by riding, or walking half a mile to-day, a little more to-morrow, and so on ; and by this means, he will soon come to perform with ease, what, had he attempted at first, he would have found impossible.

As exercise is most beneficial on an empty stomach, it appears evident, that the properest time for taking it is in the morning. I would therefore advise the water-drinkers to repair as early as they can to the wells, and to continue as long walking or riding before breakfast as their strength and circumstances will permit ; and, as breakfast is generally a light meal, those that incline may ride or walk out about an hour after it, provided the day be not too hot, or provided they can keep themselves in the shade, if it is. Some may think this an idle caution ; but I am well assured, that, though the strong and robust may ride or walk long in the sunshine with impunity ; yet valetudinarians,

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to whom I am now addressing myself, do often feel their strength and spirits much more exhausted by it, than it is consistent with prudence that they should risk. As dinner is generally a much fuller meal than breakfast, and takes a much longer time to digest, I am of opinion that none of the severer kinds of exercise should be undertaken till, at least, some hours after it; those who incline, may divert themselves by going from room to room, playing billiards, &c. but they should postpone their riding and walking out, till towards the cool of the evening, when such exercise will be more pleasant, less fatiguing, and contribute more towards the recovery of their health.

When a sufficiency of exercise has been taken through the day, there is little occasion for more after supper; nor indeed is there much opportunity for it, unless it be on ball-nights, when such as have an inclination for dancing, and no other cause to make them refrain from it but drinking the waters, may freely indulge that inclination,

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so far as not to exhaust their strength and spirits. I may, perhaps, here run counter to the opinion of some of my brethren of the faculty, as I know that medical severity often forbids dancing to the young and the gay of both sexes, purely because they are drinking the waters: Till medical knowledge, however, brings some better arguments to support this severity than it has hitherto done, I shall be of opinion, that, in most cases, a little moderate dancing may assist the salutary operations of the waters, instead of obstructing them.

As exercise, at proper times and intervals, is almost absolutely necessary, and universally beneficial to the valetudinary, so also are rest and sleep in their proper seasons; it should therefore be a general rule, with all such as are desirous of recovering health, to go to bed by eleven o'clock, at latest: By so doing, their sleep will be less interrupted, and they will rise more chearful and refreshed next morning.

A chearful temper, and a mind not rack-
 ed by care, nor ruffled by the ruder passions,
 should be a principal part of our study in
 our endeavours to recover health; not that
 I suppose mankind capable of avoiding care
 and passion in every circumstance that may
 happen while they are travelling along the
 rugged path of life, but I suppose them ca-
 pable at least of not throwing themselves in
 the way of these evils, which too many
 do, while they venture their fortunes, or
 what will greatly effect their fortunes, at
 cards; while they sit up the greatest part of
 the night, now flushed with hope, now rack-
 ed with disappointment, now suspended in
 the balance betwixt them, now elated with
 the one or depressed with the other; and,
 after all, whatever way their luck has run,
 spend a part of a sleeplefs night in bed, and
 arise from it with haggard countenances next
 morning.

Di-

*Directions for the Use of the Sulphur-water
in external Disorders.*

There are only two methods by which the complaints in which Harrowgate-water does good or ill can be properly ascertained. The *first* is the hypothetical, which the nature and component principles of the water, and the nature of the disease being known, teaches us, from the nature of these component principles, to argue what the effects of the water will be upon the human body in such and such circumstances. The *second* is the experimental, by which, without paying any regard to the component principles of the water, we take a review of what its effects have generally been in such and such diseases; and from thence deduce what
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its effects are likely to be in those of a similar nature.

The *first* of these methods is by much the most fallacious, being liable to all the uncertainty and obscurity of human learning, which, in many cases, as well as in this before us, has hardly any fixed principles to proceed upon. The *second*, being established upon facts and experience, is much more certain, though now and then also liable to deceive, owing, perhaps, to our not always being able positively to determine, whether this or the other disease be exactly of the same nature with those that we have known formerly cured by Harrowgate-water.

As the method of investigation by experience is slow, depending upon so many facts, which are neither easily collected nor compared, and whose collection is seldom made, nor comparison attended to with a sufficient degree of caution and impartiality, the improvements in medicine made in this way are, hitherto, neither so many nor so great as might naturally have been expected, considering

considering how long it has been studiously cultivated as a science. Some of the subsequent directions I shall therefore be obliged to give from principles, facts not being as yet so numerous as to enable me to give a general directory for the use of Harrowgate-water.

The sulphur-water at Harrowgate, was for a long time either reckoned too offensive or perhaps too dangerous, to be taken internally; and therefore was at first only prescribed as a bath or wash, in diseases of the skin, many of which it annually cured solely by this external mode of application; but when, in process of time, it came to be used internally also, its efficacy in removing those diseases became still more striking and obvious: So that at present, great numbers of people afflicted with them, resort to it from all parts of Great Britain and Ireland; and, as many of these are not able to afford proper medical advice, I shall endeavour to make the following directions as useful to them as possible.

The first disease of the skin I shall mention is the Scurvy, which is divided into two kinds, the land and the sea scurvy. What is generally known by the name of land-scurvy, is for the most part a foul scurfy eruption, sometimes over the whole body, sometimes only over a part of it, attended with itching, purple or blueish spots, &c. The sea-scurvy, joined to the symptoms of the land-scurvy already mentioned, is generally, in its more advanced state, a stiffness or total immobility of some of the joints, for the most part those of the knees, with loose, spongy, bleeding gums.

Whether the Harrowgate water is as useful in the sea as in the land scurvy has not yet been properly ascertained ; as but few people with real genuine sea-scurvies have hitherto attended it: But, from the benefit received by some of those few who have attended it, it is reasonable to expect considerable benefit from it when properly managed.

The scurvy, whether of the sea or land
kind,

kind, is a disease that cannot bear a great deal of evacuations; therefore such as are afflicted with it should not drink so largely of the Harrowgate water as to purge them much. The principal thing they want is to have the nature of their blood and juices changed; but few if any purgatives have a power of doing this. When they operate as purgatives, they should therefore drink the water in smaller quantities, and at longer intervals; as, for instance, half a pint, or a little less, in the morning; and repeat it in the forenoon, afternoon, and at bed-time. By this method, the water, instead of running almost intirely off by stool and urine, has time to enter into the blood, to change its nature, and eradicate all the lurking seeds of the distemper.

Such as, along with their other complaints, have stiff joints, ought to bathe them in the warm sulphur-water, for an hour together, every evening and morning, or oftener: They may likewise hold them over the steam of the water; or it will be still better, if they
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can get one of the small vapour-bath machines, which are constructed so as to direct the steam immediately upon the diseased part. With this machine they may bathe three or four hours every day; which has frequently done a great deal of good in these complaints, even when only fountain water was made use of. After the joint has been thus bathed, either in the warm water itself, or in the vapour arising from it, let it be gently rubbed dry, anointed with oil of almonds, or any other sweet oil, wrapped in flannel; and let it always be remembered to endeavour every day to move the stiff joint gently backwards and forwards in such a manner as not to give much pain.

It is of the utmost consequence, not only in the scurvy, but in all diseases of the skin, to bathe either the whole body, or the parts more particularly affected, in the sulphur-water; and the patient, immediately before he goes into the bath, should be well rubbed with a flesh-brush; or, if he cannot bear the brush, with a piece of warm flannel.

flannel. This not only opens the pores of the skin, but takes off also the scurf, which in these cases is usually upon it ; by which the water not only enters more easily into the blood, but likewise gains a more free access to, and applies itself more intimately to all the little sores upon the skin, destroys their malignancy, and heals them up sooner.

Experience has now fully demonstrated to us, that all the acid fruits, as lemons, oranges, &c. are not only the most powerful preventatives against, but also the most certain remedies for curing the sea-scurvy : But whether they answer as well in the land-scurvy, is not yet fully ascertained. If, however, we reason from the similarity of the one disease to the other, we should expect that those fruits should be alike useful in each of them. I would therefore advise, that the diet of all scorbutic patients should in a great measure consist of the ripe fruits and vegetables of the season; all of which have a greater or less antiscorbutic power, and all of which will assist the operation of the water

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ter in expelling the scorbutic taint from the blood.

I am aware here, that the greater part of those who attend Harrowgate, are afraid of eating fruit, lest it should disagree with the water: Whether this arises from custom, or is inculcated by their physicians, I know not; but I think I may venture to pronounce it an unnecessary caution, as there is nothing in the water that can change the nature of fruit into any thing hurtful, and nothing in fruit that can counteract the virtue of the water: But, notwithstanding of what I have said, fruit should always be taken moderately, and only by such with whose stomachs it has been accustomed to agree.

Almost every disorder where there is any foulness of the skin, whether with, or without itching, is at present denominated scorbutic, and Harrowgate water is universally applied to whatever is so denominated. But even this does not render it necessary that I should enter into a critical examination of what

what is really scorbutic, and what not; as there can be no great mistake in making use of this water in any of the diseases of the skin, it being for the most part serviceable in all of them, of whatever kind and denomination, if sufficient time is given it to rectify the blood and juices, and its virtues are not destroyed by intemperance and other vices. But sufficient time is seldom given it, as it is customary for most people, before they set out on their journey to Harrowgate, to fix the time of their residence there; and this time they generally punctually observe, whether the waters have agreed with them or not: A practice which needs only be considered, in order to be rectified.

The Leprosy is a disorder of the skin that seldom appears in this country; a few patients afflicted with it have attended at Harrowgate, and received considerable benefit. They should use the water in the same manner as those that have the scurvy.

The Itch is another disorder of the skin, on account of which several people attend at
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Harrowgate every season : If they are not within a few miles of it, this is giving themselves a needless trouble and expence. But, when such do attend, all that is necessary for them to do, is to go about five or six times into a bath of the sulphur-water, and have their skins well rubbed with a flesh-brush every time they are in it ; by which, without drinking the water, they will be cured, if the disorder has not been very inveterate, and of long standing.

Besides the diseases attended with foulness and itching of the skin, great numbers of people, with sores of all kinds, attend every season at Harrowgate, expecting, and sometimes finding a cure there, when every other remedy has been tried to no purpose.

As a great many of these sores are of the scrophulous kind, a few directions to scrophulous patients, on that account, become necessary.

As experience has not hitherto pointed out to us, that purging has ever done any considerable service in this disorder, it follows,
that

that, if the sulphur-water is to do any service, it will not be by taking it in quantities large enough to purge every day ; it will therefore be better for scrophulous patients to drink it as above directed in the scurvy, only with this difference, that, about twice a-week, they take as much of it as will give them a few stools ; as scrophulous people can bear purging, without loss of strength, which those that are scorbutic cannot, and as a little purging may, perhaps, co-operate with the other intentions of the waters.

Let such patients also wash their sores, evening and morning, or oftener, in the sulphur-water, a little warm. They should also bathe in it twice a-week, if their constitutions will bear it ; lay rags dipped in it over their sores, and change them pretty frequently.

All I think necessary to add on this subject is, that, if any benefit is expected from the water, in this disease, the patient must stay longer than almost for any other ; and, after all, we can only tell him, that, perhaps, the violence of his distemper may be

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checked or palliated ; for there are but few instances of mineral-waters, or medicines of any kind, ever having completely cured the scrophula ; though those who are young of either sex frequently get clear of it about the time of puberty.

Sores that are not of a scrophulous kind, but have arisen from debauchery and intemperance, are often cured by the sulphur-water. As the body is generally, in those cases, loaded with foul humours, it should be drunk, in a quantity sufficient to purge, about four or five times a-week, and used on the other days as an alterative.

Sores of this kind are nothing more than drains of the superfluous humours, instituted by nature to save the whole body from destruction. Purging with the Harrowgate-water supplies the place of these drains, and also clears the constitution of all the superfluous humours ; in consequence of which, there is no further use for the sores, and nature fills them up. But the same causes which first gave them birth, will soon make them

them break out a-fresh. Temperance, exercise, and regularity, are therefore necessary.

*Directions for the Use of the Sulphur-water
in internal Disorders.*

The sulphur-water of Harrowgate seems less extensively useful in the internal than in the external diseases of the human body. There are, however, several of the former, in which it is among the most useful remedies with which we are as yet acquainted. Some of these I shall now take notice of, and to those labouring under them, give a few directions how they should manage themselves during a course of this water.

I begin with Worms, for which the sulphur-water is one of the most sovereign remedies

medies yet discovered. The symptoms of worms are very fallacious, but the most common of them are,

An itching in the nose, a bad breath, a depraved and unequal appetite, pale dejected countenance, yawning, hiccup, hardness and swelling of the belly, looseness, grinding of the teeth, irregular feverish fits, and a swelling of the upper lip; which last is reckoned by a learned physician a more certain sign of worms than any other *.

Worms are seated either in the stomach or guts; but, wherever they are seated, pretty large doses of the water are necessary, both to destroy and carry them off. It ought therefore to be drunk in a quantity sufficient to give three or four stools every second day; and, on the other days, two drachms of powdered tin should be taken evening and morning, in a little conserve of roses, which will assist the water in destroying these vermin, and render them fit to be carried off by the next day's water.

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* Dr Home, Professor of Materia Medica in the university of Edinburgh.

If the worms are seated low in the guts, which those of the small kind generally are, then giving the water by way of glyster, as well as drinking it, becomes necessary: For this purpose, about half a pint of it should be made milk-warm, and thrown into the bowels, in the same manner as a glyster: This should be done after the patient is in bed, when the horizontal position of his body will favour its getting further up into the guts, than it could possibly do, in his upright posture, through the day; as also, that it may be the longer retained, and thereby have leisure to insinuate itself into all the nests and lurking places of the worms.

An injection may be given in this manner every night, or every second night; by which means these worms will be sooner and more effectually destroyed, than by drinking the water only. When they are fairly eradicated, let the patient beware of eating such food as contains the eggs of insects;

infects; as it appears most likely that of those they are bred in the human stomach and bowels.

Jaundice.

The Jaundice is a disease so easily distinguished from all others, that it needs no description: It is frequently cured by the sulphur-water, after a variety of remedies have been taken to no purpose. In this case, the water should be taken in such a quantity as to purge three or four times a day every second day, or oftener, if the constitution can bear it; as there is hardly any disease that requires more purging than the jaundice; on the intermediate days, too drachms of Castile soap may be taken, one half in the evening, and the other in the morning.

There are few of the internal disorders in which the warm bath answers better than in this, as it tends to relax the ducts of
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the gall bladder, and so opens a passage for the obstructing matter; as also to facilitate the passage of the excrement, which in this disease is commonly voided with difficulty.

Rheumatism.

In the acute rheumatism, or rheumatism attended with fever and inflammation, the sulphur-water cannot properly be used; but in the chronic, or slow rheumatism, where there is a stiffness and rigidity of the joints, so as either to hinder their motion altogether, or to render it exceedingly troublesome and uneasy, bathing in the warm sulphur-water has often had very good effects: And, in this case, I would recommend sweating after the bath; but let the patient sweat in his own bed; let him also go into the bath twice, and sometimes thrice, a week,
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if his constitution can bear it with impunity.

As it is essentially necessary in this, as well as in most other diseases, that the belly be kept open, a little of the water taken every morning, or every other morning, so as to procure one, or, at most, two easy stools, is necessary.

Colic.

The attack of the colic is generally so sudden, and its duration so short, that the sulphur-water of Harrowgate can seldom be applied, except to such persons as either live at or in the neighbourhood of the wells: My design therefore is not to inculcate the application of it during the fit of the colic, but in the intervals between the fits, to eradicate

radicate the cause from whence they proceed.

In all colics that proceed from indigestion, and a quantity of the indigested remainder of the meals being from time to time left in the stomach and bowels, till it become large enough to produce a fit of the colic, the sulphur-water may be drunk with advantage; as also in all such as proceed from costiveness, and from hardened excrement stopping up the passage of the gut where it lodges. This last misfortune, if I am not mistaken, happens chiefly to old people, either, perhaps, from a defect of moisture in the constitution, or in the aliments made use of, and is frequently removed by swallowing a spoonful of Florence oil every night at bed time. Such as attend Harrowgate for costiveness of this or any other kind, should only drink the water in such quantities as to procure them one easy stool a day, and at any rate never more than two. If the costiveness arises from a contraction of any

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of the guts, or of any part of them, the warm bath will then be of service.

Besides the colics attended with costiveness, which are the most dangerous, there are others attended with violent gripings and purging; such generally arise from some irritating matter lodged in the bowels, and require the water to be taken in larger quantities to purge it off.

There are others arising from nervous affections ; in them there seems to be no indications for the sulphur, but rather for the steel-water.

Haemorrhoids or Piles.

The Piles is a disorder which frequently arises merely from costiveness, and sometimes also from looseness ; in either case, the irritation on the gut produces little hard swellings, generally about the bigness of common beans, exceedingly troublesome to the patient, al-
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most in every position ; but peculiarly so when going to stool.

As nothing is of more consequence in the piles, than to have a gentle easy stool, not less than once, and not more than twice a-day, so nothing answers this purpose better than the sulphur-water, as, of all purges, it is the most mild in its operation, and attended with the least griping or sickness. The dose of it, which generally answers the purpose of procuring only one or two stools a-day, is about a pint and a half early in the morning, and taken at two different times, intermitting between them about fifteen or twenty minutes ; but, if this should be found either too much or too little, it requires only a little attention, either to augment or diminish it, so as to make it answer exactly what is necessary.

By continuing the use of the water, in this manner, for some weeks, the piles are generally much relieved, if not altogether eradicated, as the irritation on going to stool, which,

which, perhaps, first gave rise to, and afterward continued them, is hereby taken off; but the cure will be much sooner performed, if, at the same time, the patient goes into the warm bath twice a-week, which will soften and relax the parts affected, and give present relief from, as well as future security against, the pain.

There is hardly any disease that requires more temperate living than the piles, the least immoderation, either in eating or drinking, will infallibly render them worse, and retard the cure.

Dropfy.

The Dropfy is a disease, which one would naturally consider as most likely to be cured by almost total abstinence from all kinds of liquids; and there have been several instances, where an uncommon degree of resolution in abstaining from drink has performed
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ed a cure, after every other remedy had been tried to no purpose.

Notwithstanding of this, when we cast our eyes over the history of this disease, we find several cases of patients who have been cured by drinking mineral waters ; and, what is still more extraordinary, several also who have been cured by drinking immoderate quantities of various other liquids.

It seems a necessary requisite in every mineral water made use of for the cure of the dropfy, that it should purge. Harrowgate sulphur-water possesses this requisite, and seems to be as well qualified otherways for performing the cure, as any mineral water in Britain.

In this disease, small doses of the sulphur-water are generally of little or no use ; it is therefore necessary to take it in such a quantity as will purge pretty briskly ; and a peculiar degree of attention is here also necessary to discover, whether the quantity of matter evacuated by urine and stool be greater than the quantity of the water that is taken
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in ; if it be, the patient may safely proceed in his drinking ; if not, he must proceed with caution, having, while that is the case, no flattering prospect of advantage.

When all, or the greater part, of the water in the belly is evacuated by the use of the sulphur-water, the body is always left in an exceedingly relaxed state ; a course of the steel-water, therefore, and other strengthening medicines, become necessary : Nor indeed, from the moment that the belly begins to decrease, should we ever neglect to keep it swathed with a roller or belt, which we can constantly make tighter in proportion to that decrease.

Indigestion and Complaints of the Stomach.

Indigestion is the fruitful source from which almost all the complaints of the human stomach proceed. The general causes
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of indigestion are, eating and drinking too much, hard study, and inactivity of life. Besides these, there are others which ought carefully to be avoided, though it would be too tedious to mention them here separately.

When indigestion proceeds from the stomach having been for some time overloaded, without having lost much of its strength, let a gentle vomit be taken first ; then let the sulphur-water be taken in such a quantity as to procure two or three stools about four or five times in the week, if the constitution can bear it. This method, by carrying off the superfluous load, will soon render the body brisk and active, and restore the power of the stomach, provided care is taken not to indulge a false appetite in this and many other cases often created by the water.

There are few diseases in which the operation of the Harrowgate water is more various and uncertain than in those of the stomach. I have known many instances of people, who, for years together, have been troubled

troubled with a load at their stomach after eating, with sour belchings, and almost all the other symptoms of indigestion, who have, at last, been cured by this water ; on the other hand, I have known several, whose complaints seemed exactly the same, and yet received no benefit, but rather hurt from it, though the trials were made with a sufficient degree of regularity and perseverance.

After the most diligent inquiry into this seeming contradiction, it appears to be thus : That such as are troubled with the above complaints, and, at the same time, can bear evacuations, and have no remarkable weakness of nerves, generally find relief from the sulphur-water ; whereas, such as cannot bear evacuations, and are of a weak relaxed state of nerves, from the use of it seldom find relief, but rather an increase of their complaints. I would therefore advise such as have weak nerves, to begin it with caution, and leave off the use of it soon, if they find it does not agree with them.

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Indigestion is among the most obstinate of all diseases, and generally accompanied with a long and vexatious train of symptoms, as load and oppression on the spirits, headachs, habitual costiveness, wind in the stomach and bowels, &c. The mode of late years has been, to endeavour to remove all these by a regimen perhaps too rigidly abstemious; but, so far as my acquaintance hath reached, such as have put themselves under this regimen have profited but little by the experiment. Such, therefore, as desire relief from the sulphur-water, must neither too scrupulously restrain, nor too riotously indulge their appetite.—Health is not the result of extremes.

Of the Gout.

Of late years, since the gout became so fashionable a distemper in England, it has been almost as fashionable for those who

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were, or thought themselves, afflicted with it, to repair to some one or other of the watering places, in order, either to procure relief from the distemper when already formed, or to make it form into more regular fits; and, among the other places lately resorted to for this purpose, Harrowgate has had a share of patients of both sorts.

The experience of mankind seems to vouch, that there are some mineral-waters that have a power of hastening a fit of the gout, where that distemper is already lurking in the constitution; but that power only residing in a few, has, by a mistake in reasoning, been supposed to be diffused over a great many; for it seems to be a fact, that more people have an attack of the gout, while attending mineral-waters, than almost in any other situation or circumstances; hence such attacks have generally been attributed to the mineral-water they have been attending. But a little attention to the subject will point out to us other causes
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perhaps more powerful than many of the mineral-waters resorted to, either in this or other parts of the world.

At all places where numbers of people are gathered together to use mineral-waters, large quantities of victuals are provided, and elegant, or, at least, plentiful tables generally kept ; hence many are induced, by variety, to indulge their appetite, and, by company, often to take a liberal glass ; and to these causes, in my opinion, the frequent attacks of the gout at such places are more owing, than to the waters themselves.

But, though these indulgences at many of the watering places may be the sole causes of a fit of the gout, there is in the Harrowgate water itself a quality which may likewise do it. Experience has taught many of those afflicted with this distemper, that uncommon evacuations of any kind have a power of bringing on a fit ; therefore to the purging quality of the Harrowgate water may this fit often be attributed. But this is a method of obtaining it, which
cannot

cannot be reckoned adviseable ; as it is like weakening a garrison in order to give the enemy an opportunity of attacking it with greater advantage.

Such as have been subject to regular fits of the gout, are more liable to have them brought on by large evacuations, than such as have only an irregular gout, emulating a variety of other diseases. These last are generally, in this case, rather attacked with violent sickness at stomach, pains and giddiness in the head, things in themselves dangerous, peculiarly so when arising from a gouty cause; and therefore what one would rather wish to avoid, than to procure by art. Harrowgate sulphur-water, for these reasons, does not promise much in gouty habits, as its greatest power seems to be that of bringing on a fit by means of evacuating, which any other purge would as effectually accomplish.

F I N I S.

